Calibration Database Applications

Database

- Almost all the databases are cut into prod. except Calorimeter.
- Database Servers
 - All servers have been built with DAN.
 - Almost all servers are running against prod. except Calorimeter.
- c++ clients (calibraters)
 - Almost all calibraters are built in D0reco p13.01 or later release except Calorimeter.
 - Memory foot prints improved for SMT. Needs work on CFT.
- Data transfer from Online DB
 - Up to date for almost all sub-systems except Calorimeter.

Calibration Database Applications

- Remaining Tasks
 - Graphical viewer
 - Performance improvements
 - Memory usage
 - Speed

Production Server Needs

- Two sets of calibration constants take up 800 MB of memory.
- It takes 10 min to retrieve one set of SMT constants from DB and deliver to a client.
- It takes 50 sec to deliver to a client with data in cache.
- SMT server will be hit every 30 sec.
- Assume that 10 different (but fixed) sets of calibration constants are requested at any given time.
- At least 5 nodes with each having 1GB of memory.
- A scalable system that can address multiple servers.

Production Server Deployment Plans

- Production servers for farm run on d0dbsrv1
 - Memory: 900 MB, Swap space: 1 GB
 - 1 set of calibration servers with 2 sets of constants fill up memory.
 - 4 sets of constants fill up Swap space
- Where should production servers for the rest run?
 - Four more Linux nodes with some traffic control
 - A multi-cpu workstation with large memory
 - We need these Dec 1, 2002.
- Host servers for off-cite proxy?
 - Where do they run?
 - How many do we need?
 - Each Offsite farm could process different set of runs.